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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/848,756	05/19/2004	Kenichi Nishiuchi	10873.0647USC1	4650
7590	09/27/2005		EXAMINER PATEL, GAUTAM	
Hamre, Schumann, Mueller & Larson P.C. P.O. Box 2902-0902 Minneapolis, MN 55402			ART UNIT 2655	PAPER NUMBER

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/848,756

Applicant(s)

NISHIUCHI ET AL.

Examiner

Gautam R. Patel

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 6 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4, 6 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/786,735.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/28/05; 2/28/05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-2, 4 and 6 are pending for the examination after preliminary amendment.

NOTES/REMARKS

2. The restriction was sent by mistake. eDAN system had the preliminary amendment in wrong place. The Applicants are correct and the restriction requirement is moot.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- a. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,795,389. Although the conflicting claims are not identical, they are not patentably distinct from each other because one of ordinary skill in the art would have realized that eliminating a step or an element and its function are not patentable if the function of the step is not desired as shown in *Ex parte Wu*, 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989). See also *In re Larson*, 340 F.2d 965, 144 USPQ 347 (CCPA 1965); and *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

As to claims 2, 4 and 6 since they are also fully disclosed in the patent number 5,931,904; as claims 2, 2, 3 they are therefore considered rejected as non-statutory double patenting as set forth in the paragraphs here in above.

- b. Similarly claims 1-2, 4 , 6 and 12 are also rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,894,962. Although the conflicting claims are not identical, they are not patentably distinct from each other because one of ordinary skill in the art would have realized that eliminating a step or an element and its function are not patentable if the

function of the step is not desired as shown in Ex parte Wu, 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989). See also In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965); and In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshioka et al., EPO Publication 0 567 086 A1 (hereafter Yoshioka), in view of Satoh et al., US patent 5,428,597 (hereafter Satoh).

As to claim 1, Yoshioka discloses the invention as claimed [see Figs. 1 and 4], including two information layer, and equal number of sector addresses, comprising:

a substrate and at least two information layers formed on the substrate, the information layer formed of a thin film that shows a change that can be detected optically by light beam irradiation, each information layer has a sector structure including a sector address and a data area that are divided in a circumferential direction, each information layer has the same number of sector addresses in the circumferential direction, and

and positions of the sector addresses of the respective information layers coincide in the circumferential direction [col. 2, line 44 to col. 3, line 48; col. 5, lines 15-51].

Yoshioka discloses all of the above elements, including several layers of information storage and each information layer has same number of sector addresses in circumferential direction position of these addresses coincides. Yoshioka does not specifically disclose that these layers are transparent to the extent claimed.

However, use of the transparent layers is well known in the art for a long time. Also, Satoh clearly discloses:

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a separating layer [fig. 3, layer 5] that is transparent to a wavelength of the light beams is formed between the information layers [col. 3, lines 41-48, col. 6, lines 50-68].

Both Yoshioka and Satoh are interested in improving the multi-layered disk storage in an optical disk device with minimum management area and device to control the disk.

One of ordinary skill in the art at the time of invention would have realized that it would be advantageous to not to increase the thickness of recording layers in multiple layers disk.

Therefore, it would have been obvious to have used a transparent layer in the system of Yoshioka as taught by Satoh because one would be motivated to provide higher density recording on plural disk without using large diameter of the beams, thus avoiding crosstalk between neighboring tracks [col. 1, lines 47-55].

5. As to claim 2, Yoshioka discloses:

a second substrate having a sector structure including a sector address and a data area that are divided in a circumferential direction, a first information layer is formed on the first substrate and a second information layer opposed to the first information layer is formed on the second substrate, and a position of the sector address of the first substrate and a position of the sector address of the second substrate coincide in the circumferential direction [col. 2, line 44 to col. 3, line 48; col. 5, lines 15-51].

6. As to claim 12, it rejected for the similar reasons as claim 1, supra.

7. Claims 4 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over and Okada as applied to claims 1-2 and 12 above, and further in view of Kawamura et al., US. patent 6,424,614 (hereafter Kawamura).

As to claim 4, the combination of 1 and Satoh discloses all of the above elements, including dual layered disks and different areas for storing. The combination does not disclose well known details of management area, sector position Id etc.

However, Kawamura clearly discloses:

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a management area, and a sector position identifier for identifying the position of a sector is located in an area other than the data area, the sector address, and the management area of each information layer so as to have a certain relationship to the sector address of each information layer in a circumferential direction [col. 5, lines 13-30 and col. 6, line 58 to col. 7, line 39].

All Yoshioka, Satoh and Kawamura are interested in improving the multi-layered disk storage in an optical disk device with minimum management area and device to control the disk.

One of ordinary skill in the art at the time of invention would have realized that it would be advantageous to provide different management and sector position ID in recording layers in multiple layers disk as compared to single layered disk for more efficient use of these disk and faster access of layers.

Therefore, it would have been obvious to have used a management area and sector ID in the system of Yoshioka and Satoh as taught by Kawamura because one would be motivated to provide higher density recording on plural disk and provide faster access to all layers as related to multiple layered disk [col. 1, lines 28-35].

8. As to claim 6, it rejected for the similar reasons as claim 4, supra.

Other prior art cited

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Toshihisa JPO Publication no. 10-112066 "Information recording medium".

Contact Information

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 703-872-9306.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Wayne Young can be reached on (571) 272-7582.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.


GAUTAM R. PATEL
PRIMARY EXAMINER

Gautam R. Patel
Primary Examiner
Group Art Unit 2655

September 23, 2005